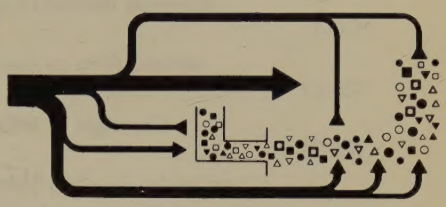
THE JOURNAL FOR RESEARCH ON INTAKE, ITS CONTROL AND ITS CONSEQUENCES

# APPETITE



Volume 3, Numbers 1–4, 1982

**Chief Editors**

David Booth

Gordon J. Mogenson

Judith Rodin

ACADEMIC PRESS

*A Subsidiary of Harcourt Brace Jovanovich, Publishers*

London New York Toronto Sydney San Francisco

Copyright © 1982, by Academic Press Inc. (London) Limited

ALL RIGHTS RESERVED

No part of this volume may be reproduced in any form, by photostat, microfilm, or any means, without written permission from the publishers.

*Printed in Great Britain by Taylor & Francis (Printers) Limited, Basingstoke, Hants.*

# Contents

*Volume 3, number 1, March 1982*


Induced bad habits: adjunctive ingestion and grooming in human subjects.
M. B. CANTOR, S. E. SMITH and B. R. BRYAN . . . . . 1–12

Some like it hot: a temporal analysis of hedonic responses to chili pepper.
P. ROZIN, L. EBERT and J. SCHULL . . . . . 13–22

Some aspects of the liking for hot coffee and coffee flavor.
B. M. CINES and P. ROZIN . . . . . 23–34

Effect of diet hydration on food and water intake, efficiency of food utilization and response to fast and realimentation in rats with dorsomedial hypothalamic hypophagia and growth retardation.
L. L. BERNARDIS and L. L. BELLINGER . . . . . 35–52

The effects of high dietary zinc on food intake in the domestic fowl.
M. J. GENTLE, W. A. DEWAR, P. A. L. WIGHT and K. M. DICK. . . . 53–60

Dietary intake in obese women.
W. KULESZA . . . . . 61–68

Book reviews . . . . . 69–77

Marian Stamp Dawkins, *Animal suffering: the science of animal welfare* (N. Mrosovsky)

Wanda Wyrwicka, *The development of food preferences. Parental influences and the primacy effect* (D. A. Booth)

A. J. Stunkard (Ed.), *Obesity* (J. S. Garrow)

J. R. K. Robson (Ed.), *Food, ecology and culture: readings in the anthropology of dietetic practices* (L. White)

Phia Sing, *Traditional recipes of Laos* (E. Rozin)

R. L. Weinsier and C. E. Butterworth, *Handbook of clinical nutrition* (W. P. T. James)

Peggy L. Pipes, *Nutrition in infancy and childhood* (R. Crow)

Calendar of events . . . . . 79


*Volume 3, number 2, June 1982*


Cholecystokinin-octapeptide effects on eating elicited by "external" versus "internal" cues in rats.
T. SCHALLERT, M. PENDERGRASS and S. B. FARRAR . . . . . 81–90

Age-dependent suppression of body weight gain by exogenous glycerol.
J. NORMAN, W. COLEMAN, D. RICE and P. CHANDLER. . . . . 91–97

Elevated insulin and satiety in obese and normal-weight rats.
D. A. VANDERWEELE, E. HARACZKIEWICZ and T. B. VAN ITALLIE . . 99–109

The role of the autonomic nervous system in hypothalamic feeding syndromes.
C. V. GRIJALVA and E. LINDHOLM. . . . . 111–124

Effects of instrumental consumption on children's food preference.
L. L. BIRCH, D. BIRCH, D. W. MARLIN and L. KRAMER . . . . . 125–134

Gnawing is the preferred consummatory behavior initially induced by tail pinch.
A. S. LEVINE and J. E. MORLEY . . . . . 135–138

Dietary experience and sweet taste preference in human infants.
G. K. BEAUCHAMP and M. MORAN . . . . . 139–152

Effects of age and feeding regimen on protein and carbohydrate self-selection.
R. A. MCARTHUR and J. E. BLUNDELL . . . . . 153–162

Starch content of ordinary foods associatively conditions human appetite and satiation, indexed by intake and eating pleasantness of starch-paired flavours.
D. A. BOOTH, P. MATHER and J. FULLER . . . . . 163–184

Book reviews . . . . . 185–186
Mary Sykes (Ed.) *Aspects of gastroenterology for nurses* (J. G. Kral)
David Crabbe and Simon Lawson, *The world food book* (D. G. Land)
J. C. Somogyi and G. Varela (Eds), *Nutritional deficiencies in industrialized countries* (D. A. Booth)

Recent new publications . . . . . 187
Calendar of events . . . . . 187
Acknowledgment. . . . . 188

*Volume 3, number 3, September 1982*

Maintenance of mating-induced, regulatory patterns in castrated, testosterone-treated male rats.
F. A. WEIZENBAUM, S. STEELE and F. C. GWAZDAUSKAS . . . . . 191–202

The role of carbohydrates in appetite, hunger and obesity.
P. J. GEISELMAN and D. NOVIN . . . . . 203–223

On the role of hypoglycemia in carbohydrate appetite.
A. SCLAFANI . . . . . 227–228

Nutritional practices and food intake measurements and their relationship to socio-economic grouping, location and their apparent nutritional adequacy in children.
D. O. NNANYELUGO . . . . . 229–241

Ovariectomy without obesity and obesity without hyperadipocytocity. Supermarket dietary and ovariectomy-induced obesities compared in weanling and adult rats.
E. L. SIMSON, A. P. JONES, M. J. SCHWARZ and R. M. GOLD . . . . . 243–253

A quadratic equation adequately describes the cumulative food intake curve in man.
H. R. KISSILEFF, J. THORNTON and E. BECKER . . . . . 255–272

Feeling fat yet unconcerned: self-reported overweight and the restraint scale.
A. DREWNOWSKI, D. RISKEY and J. A. DESOR . . . . . 273–279

Weight change and dietary concern in the overweight: are they really independent?
C. P. HERMAN and J. POLIVY. . . . . 280–281

Measures of restraint: separating dieting from overweight.
A. DREWNOWSKI, D. RISKEY and J. A. DESOR . . . . . 282

The effects of mere exposure on liking for edible substances.
P. PLINER . . . . . 283–290

Book reviews . . . . . 291–294
J. Solms and R. L. Hall (Eds.), *Criteria of food acceptance—how man chooses what he eats* (A. S. Szczesniak).
H. E. Aebi, G. B. Brubacher and M. R. Turner (Eds.), *Problems in nutrition research today* (A. E. Harper).
M. R. Zales (Ed.), *Eating, sleeping and sexuality. Treatment of disorders in basic life functions* (D. A. Booth).

Recent new publications . . . . . 295
Calendar of events . . . . . 295
Announcements . . . . . 224–226

*Volume 3, number 4, December 1982*

Preference—aversion drinking in the rat: the nature of postingestive satiety for sugar solutions.
D. G. MOOK and S. A. BRANDSEY . . . . . 297–307

Effect of the angiotensin I converting enzyme inhibitor, MK-421, on experimentally induced drinking.
M. J. FREGLY, D. C. FATER and J. E. GREENLEAF . . . . . 309–319

Characteristics of the heart rate in relation to the palatability of food in dogs.
E. KOSTARCZYK and E. FONBERG . . . . . 321–328

Food and water intake of previously undernourished and well fed age-control and weight-control rats.
J. M. CELEDON and J. L. SMART . . . . . 329–333

Food avoidance in rats: the differential effects of shock, illness and repellents.
C. R. GUSTAVSON and J. C. GUSTAVSON . . . . . 335–340

The special role of nausea in the acquisition of food dislikes by humans.
M. L. PELCHAT and P. ROZIN . . . . . 341–351

I don't like it; I never tried it: effects of exposure on two-year-old children's food preferences.
L. L. BIRCH and D. W. MARLIN . . . . . 353–360

Obesity and flavor perception: multidimensional scaling of soft drinks.
A. DREWNOWSKI, J. A. GRINKER and J. HIRSCH . . . . . 361–368

Pleasantness of colourless and coloured soft drinks and consumer attitudes to artificial food colours.
H. TUORILA-OLLIKAINEN . . . . . 369–376

Book reviews . . . . . 377–381
T. Silverstone (Ed.), *Drugs and appetite* (D. A. Booth)
B. J. Rolls and E. T. Rolls, *Thirst* (E. M. Blass)
I. Krieger, *Paediatric disorders of feeding, nutrition and metabolism* (L. S. Taitz)

Recent new publications . . . . . 382

Calendar of events . . . . . 383

# Index of Authors


Beauchamp, G. K., & Moran, M. Dietary experience and sweet taste preference in human infants, 139–52.
Becker, E., *see* Kissileff, H. R., 255–72
Bellinger, L. L., *see* Bernardis, L. L., 35–52
Bernardis, L. L., & Bellinger, L. L. Effect of diet hydration on food and water intake, efficiency of food utilization and response to fast and realimentation in rats with dorsomedial hypothalamic hypophagia and growth retardation, 35–52
Birch, D., *see* Birch, L. L., 125–34
Birch, L. L., & Marlin, D. W. I don't like it; I never tried it: effects of exposure on two-year-old children's food preferences, 353–60
Birch, L. L., Birch, D., Marlin, D. W., & Kramer, L. Effects of instrumental consumption on children's food preference, 125–34
Blundell, J. E., *see* McArthur, R. A., 153–62
Booth, D. A., Mather, P., & Fuller, J. Starch content of ordinary foods associatively conditions human appetite and satiation, indexed by intake and eating pleasantness of starch-paired flavours, 163–84
Brandsey, S. A., *see* Mook, D. G., 297–307
Bryan, B. R., *see* Cantor, M. B., 1–12

Cantor, M. B., Smith, S. E., & Bryan, B. R. Induced bad habits: adjunctive ingestion and grooming in human subjects, 1–12
Celedón, J. M., & Smart, J. L. Food and water intake of previously undernourished and well fed age-control and weight-control rats, 329–33
Chandler, P., *see* Norman, J., 91–7
Cines, B. M., & Rozin, P. Some aspects of the liking for hot coffee and coffee flavor, 23–34
Coleman, W., *see* Norman, J., 91–7

Desor, J. A., *see* Drewnowski, A., 273–9
Desor, J. A., *see* Drewnowski, A., 282
Dewar, W. A., *see* Gentle, M. J., 53–60
Dick, K. M., *see* Gentle, M. J., 53–60
Drewnowski, A., Grinker, J. A., & Hirsch, J. Obesity and flavor perception: multidimensional scaling of soft drinks, 361–8
Drewnowski, A., Riskey, D., & Desor, J. A. Feeling fat yet unconcerned: self-reported overweight and the restraint scale, 273–9
Drewnowski, A., Riskey, D., & Desor, J. A. Measures of restraint: separating dieting from overweight, 282

Ebert, L., *see* Rozin, P., 13–22

Farrar, S. B., *see* Schallert, T., 81–90
Fater, D. C., *see* Fregly, M. J., 309–19
Fonberg, E., *see* Kostarczyk, E., 321–8
Fregly, M. J., Fater, D. C., & Greenleaf, J. E. Effect of the angiotensin 1 converting enzyme inhibitor, MK-421, on experimentally induced drinking, 309–19
Fuller, J., *see* Booth, D. A., 163–84

Geiselman, P. J., & Novin, D. The role of carbohydrates in appetite, hunger and obesity, 203–23
Gentle, M. J., Dewar, W. A., Wight, P. A. L., & Dick, K. M. The effects of high dietary zinc on food intake in the domestic fowl, 53–60
Gold, R. M., *see* Simson, E. L., 243–53
Greenleaf, J. E., *see* Fregly, M. J., 309–19
Grijalva, C. V., & Lindholm, E. The role of the autonomic nervous system in hypothalamic feeding syndromes, 111–24
Grinker, J. A., *see* Drewnowski, A., 361–8
Gustavson, C. R., & Gustavson, J. C. Food avoidance in rats: the differential effects of shock, illness and repellents, 335–40
Gustavson, J. C., *see* Gustavson, C. R., 335–40
Gwazdauskas, F. C., *see* Weizenbaum, F. A., 191–202

Haraczkiewicz, E., *see* Vanderweele, D. A., 99–109
Herman, C. P., & Polivy, J. Weight change and dietary concern in the overweight: are they really independent?, 280–1
Hirsch, J., *see* Drewnowski, A., 361–8

Jones, A. P., *see* Simson, E. L., 243–53

Kissileff, H. R., Thornton, J., & Becker, E. A quadratic equation adequately describes the cumulitive food intake curve in man, 255–72
Kostarczyk, E., & Fonberg, E. Characteristics of the heart rate in relation to the palatability of food in dogs, 321–8
Kramer, L., *see* Birch, L. L., 125–34
Kulesza, W. Dietary intake in obese women, 61–8

Levine, A. S., & Morley, J. E. Gnawing is the preferred consumatory behavior initially induced by tail pinch, 135–8
Lindholm, E., *see* Grijalva, C. V., 111–24

Marlin, D. W., *see* Birch, L. L., 125–34
Marlin, D. W., *see* Birch, L. L., 353–60
Mather, P., *see* Booth, D. A., 163–84
McArthur, R. A., & Blundell, J. E. Effects of age and feeding regimen on protein and carbohydrate self-selection, 153–62
Mook, D. G., & Brandsey, S. A. Preference–aversion drinking in the rat: the nature of postingestive satiety for sugar solutions, 297–307
Moran, M., *see* Beauchamp, G. K., 139–52
Morley, J. E., *see* Levine, A. S., 135–8

Nnanylelugo, D. O. Nutritional practices and food intake measurements and their relationship to socio-economic grouping, location and their apparent nutritional adequacy in children, 229–41
Norman, J., Coleman, W., Rice, D., & Chandler, P. Age-dependent suppression of body weight gain by exogenous glycerol, 91–7
Novin, D., *see* Geiselman, P. J., 202–23

Pelchat, M. L., & Rozin, P. The special role of nausea in the acquisition of food dislikes by humans, 341–351
Pendergrass, M., *see* Schallert, T., 81–90
Pliner, P. The effects of mere exposure on liking for edible substance, 283–90
Polivy, J., *see* Herman, C. P., 280–1

Rice, D., *see* Norman, J., 91–7
Riskey, D., *see* Drewnowski, A., 273–9
Riskey, D., *see* Drewnowski, A., 282
Rozin, P., Ebert, L., & Schull, J. Some like it hot: a temporal analysis of hedonic responses to chili pepper, 13–22
Rozin, P., *see* Cines, B. M., 23–34
Rozin, P., *see* Pelchat, M. L., 341–51

Schallert, T., Pendergrass, M., & Farrar, S. B. Cholecystokinin-octapeptide effects on eating elicited by "external" versus "internal" cues in rats, 81–90
Schull, J., *see* Rozin, P., 13–22
Schwarz, M. J., *see* Simson, E. L., 243–53
Sclafini, A. On the role of hypoglycaemia in carbohydrate appetite, 227–8
Simson, E. L., Jones, A. P., Schwarz, M. J., & Gold, R. M. Ovariectomy without obesity and obesity without hyperadipocytocity. Supermarket dietary and ovariectomy-induced obesities compared in weanling and adult rats, 243–53
Smart, J. L., *see* Celedón, J. M., 329–33
Smith, S. E., *see* Cantor, M. B., 1–12
Steele, S., *see* Weizenbaum, F. A., 191–202

Thornton, J., *see* Kissileff, H. R., 255–72
Tuorila-Ollikainen, H. Pleasantness of colourless and coloured soft drinks and consumer attitudes to artificial food colours, 369–76

VanderWeele, D. A., Haraczkiewicz, E., & Van Itallie, T. B. Elevated insulin and satiety in obese and normal-weight rats, 99–109
Van Itallie, T. B., *see* VanderWeele, D. A., 99–109

Weizenbaum, F. A., Steele, S., & Gwazdauskas, F. C. Maintenance of mating-induced, regulatory patterns in castrated, testosterone-treated male rats, 191–202
Wight, P. A. L., *see* Gentle, N. J., 53–60